

Applicant : C. Tondering
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REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold type.

Claims 1, 10, 14, 17, 18, 22, 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not sufficiently provide for enabling one of ordinary skill in the art the ability to regulate usage of the resource by the at least two processes based on the indicated available amount of credit and allowing increased further usage of the resource by the at least two processes based on said decreasing of said value. If this is an oversight by the Examiner, the Applicant is invited to point out the relevant portions of the disclosure that pertain to the aforementioned limitations.

Claims 1, 10, 14, 17, 18, 22, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims 1, 10, 17, 18, 22, and 24 recite the limitation, "... allowing increased usage of the resource by the at least two processes based on said decreasing". This is unclear. Since previous limitations of the claim recite that the value is a total amount of current usage of the resource, by decreasing the value one is decreasing the current usage of the resource by the at least two processes. It is impossible to allow increased usage of the resource while decreasing the value indicating the usage of the resource. The value will inherently increase when the resource is used. Correction is required.

Without conceding the examiner's positions, the claims have been amended.

Claims 1, 10, 17, and 18 are supported by the specification, for example, page 5, lines 1-3; page 7, line 21 to page 8 line 5; and page 9, lines 11-16. Claim 14 is supported by the specification, e.g., page 10, line 21 to page 11, line 3. Claim 22 is supported by the specification, e.g., page 9, lines 1-9 (see also Appendix A, page 3, description of "CreditLeft").

Claims 1, 4, 5, 8-10, 17-18, and 21-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Lowe (USPN 6,125,396).

Referring to claims 1 and 26, Lowe discloses a method of managing usage of a resource (i.e. access rates to a shared file server) in a network system, the network system comprising:

indicating a value representing total amount of usage of the resource by at least two processes using the resource (it is inherent that the system taught by Lowe maintains some form of memory that stores the amount of

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resource usage in the system by the statement "based on current usage of shared resource 428 by other clients..." col. 4, line 30; col. 7, lines 15-16); indicating an available amount of credit (usage reserve) for usage of the resource by the at least two processes based on said value (e. g. abstract; Figure 3, reference character 324; col. 5);

decreasing said total resource usage according to a function of time (since Lowe discloses that the process repeats in intervals, such as per second, it inherently decreases the total resource usage based on a function of time) (col. 5, line 55-62; col. 7, line 39 to col. 8, line 45)

regulating usage of the resource by the at least two processes based on the indicated available credit and allowing increased usage of the resource by the at least two processes based on said decreasing (the example taught by Lowe discloses that at the one second interval the desired usage rate is 10 blocks/second, the second time interval is 7 blocks/second, third time interval is 7 blocks/second, fourth time interval is 12 blocks/second) (Figure 4; col. 5, line 55-62; col. 7, line 39 to col. 8, line 45).

Lowe does not disclose that the total resource usage is decreased using a preset amount per unit of time. However it is well known and expected in the art that a leaky bucket system has the ability to have a predetermined (i.e., constant) drain level (i.e. constant rate usage by the clients of Lowe) and would have been obvious to one of ordinary skill in the art to provide for decreasing the value according to a predetermined function of time for simplicity of programming and to provide for the server to exercise some authority as to the rate at which clients may download data, thereby enhancing overall QoS for all the clients as well as for a more efficient bandwidth monitoring.

The applicant thanks the Examiner for the telephone interview on April 19, 2004. The Examiner and the applicant discussed claim amendments that are reflected in the listing above.

In claim 1, the current usage value represents "a total amount of a resource that is managed by a software tool and is currently in use by at least two processes." The current usage value increases when a process increases its use of the resource. By contrast, in the leaky bucket system of Lowe, the water level represents a "reserve," and the water level *decreases* when a client requests usage of a resource controlled by the leaky bucket. Thus, Lowe teaches away from claim 1.

An advantage of using a current usage value to "represent the total amount of the resource that is managed by the software tool and is currently in use by the at least two processes" is that fewer variables need to be modified when the software tool is used. For example, the maximum usage level for a particular process can be modified without changing the current usage value. When a process uses a resource,

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only the current usage value is modified by an addition of the amount of resource that is used. If a leaky bucket model were used in which the water level represents a reserve value, as in Lowe, then changing the maximum usage level for a particular process would also require modification of the reserve value. When a process uses a resource, the reserve value associated with each process would have to be changed, since the reserve depends on the maximum usage level, which may be different for different processes.

Claims 2-23 and 25-32 are patentable for at least the same reasons as claim 1.

Please apply \$108 for excess claims fee and any other charges or credits to deposit account 06-1050, referencing attorney docket 10559-233001.

Respectfully submitted,

Date: 4/26/2004

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* See attached document certifying that Rex Huang has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).

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Expires: May 16, 2004



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